WILCO FINISHING CORP. (DAR SITE ID #149)

Address:	1288 Willoughby Avenue, Brooklyn, New York 11237 (also listed at 375 Suydam Street)
Tax Lot Parcel(s):	Brooklyn Block 3210, Lot 23
Latitude:	40.704821
Longitude:	-73.92166
Regulatory Programs/ Numbers/Codes:	USEPA ID No. NYD987031648, NPDES ID No. NYP081080, AFS No. 3604703030, PBS No. 2-090581
Analytical Data Status:	☐ Electronic Data Available ☒ Hardcopies only ☐ No Data Available

1 SUMMARY OF CONSTITUENTS OF POTENTIAL CONCERN (COPCs) TRANSPORT PATHWAYS TO THE CREEK

The current understanding of the transport mechanism of contaminants from the upland portions of the Wilco Finishing Corp. site (site) to Newtown Creek is summarized in this section and Table 1 and supported in the following sections.

Overland Transport

The site is located approximately 0.51 mile from English Kills. This is not a complete historical or current pathway.

Bank Erosion

The site is not adjacent to Newtown Creek or associated waterways. This is not a complete historical or current pathway.

Groundwater

The site is located approximately 0.51 mile from Newtown Creek and associated waterways. Information regarding on-site groundwater investigations was not identified in documents available for review. There is insufficient evidence to make a historical or current pathway determination.

Overwater Activities

The site is not adjacent to Newtown Creek and associated waterways and has no overwater activities. This pathway is not historically or currently complete.

Stormwater/Wastewater Systems

This site is within the Newtown Creek Water Pollution Control Plant (WPCP) sewershed. Wastewater generated at the site is treated (as described in Section 7.1) prior to discharge into a combined municipal sewer system. When the combined flows exceed the system's capacity, untreated combined sewer overflows (CSOs) are discharged through Outfall NC-015 to English Kills, a tributary to Newtown Creek (NYCDEP 2007). In 1992, the New York City Department of Environmental Protection (NYCDEP) issued an industrial wastewater discharge (IWD) permit authorizing the discharge of industrial wastewater from the site to the municipal sewer (NYCDEP 1992b). The permit was renewed in 1993, 1998, 2002, and 2003 and is discussed in Section 9.3 (NYCDEP 1993, 1998, 2002b, 2003a). Additional permits were not identified in documents available for review. Metal concentrations and pH exceeded permitted discharge limits several times between 1995 and 2004 (NYCDEP 1995, 1996a, 2002a, 2003b, 2004b). To the extent discharges were coincident with CSO events, this pathway is a complete historical pathway. There is insufficient evidence to make a current pathway determination.

Information regarding on-site stormwater management and infrastructure was not identified in documents available for review. Direct discharge of stormwater and wastewater is not a complete historical or current pathway.

Air Releases

The Air Facility System (AFS) database indicates that an air discharge permit (AFS No. 3604703030) has been issued to the site; however, copies of the permit were not located in documents available for review (USEPA 2011). There is insufficient evidence to make a historical or current pathway determination.

2 PROJECT STATUS

Information regarding on-site environmental investigations was not identified in documents available for review. A New York State Department of Environmental Conservation (NYSDEC) Site Code was not found for this site.

3 SITE OWNERSHIP HISTORY

Respondent Member: ☐ Yes ☒ No

Owner	Years	Occupant	Type of Operation
Unknown	1907	Vacant	Vacant
	ca. 1933	Unknown	60-car-capacity garage
Izi Bazinover	Unknown – 1976		Unknown
G.M. Realty	1976 – 1977		
State Realty Company	1977 – 1985		
	ca. 1985 – 1992	Lafayette Display Fixtures, Inc., aka Lafayette Polishing and Plating	Metal finishing/ Electroplating
	1992 – present	Wilco Finishing Corporation	Electroplating
Dronacharje Balgobin/Guyana Plating, LLC	2010 – present	Guyana Plating, LLC	

Note:
ca. – circa
Additional discussion and sources provided in Section 6

4 PROPERTY DESCRIPTION

The site occupies approximately 0.24 acre[1] within the Williamsburg neighborhood of Brooklyn, New York, and is located approximately 0.51 mile from English Kills, a tributary to Newtown Creek. The site is approximately 40 feet above mean sea level, and site topography slopes gently down to the northwest toward English Kills. The east side of the

[1] Acreage is an approximation of the site tax parcel using geographic information system data.

site is covered by a building and a parking lot occupies a portion of the west side of the site, as shown on Figure 1.

The site is zoned for manufacturing, and a residential zone is located to the east and south of the site (NYCDCP 2011). Remedial sites Tru-Tone Metal Products (DAR Site ID #146) and Technical Metal Finishers (DAR Site ID #43) are located west of the site, as shown in Figure 1.

5 CURRENT SITE USE

The site is currently occupied by Wilco Finishing Corp. and Guyana Plating, LLC (NYSDOS 2011). Wilco Finishing Corp., site occupant since 1992, registered in New York State as a domestic business corporation in January 1992 (NYSDOS 2011). Operations include nickel, chromium and copper plating, nickel and chromium stripping, acid and alkaline cleaning, acid pickling, electro cleaning, and polishing. Guyana Plating, LLC, site occupant since 2010, registered in New York State as a domestic limited liability company in June 2010 (NYSDOS 2011). Guyana Plating, LLC, also specializes in electroplating.

6 SITE USE HISTORY

In 1907, the site appeared to be vacant (Sanborn 1907). In 1933, a 60-car-capacity garage occupied the site (Sanborn 1933). By 1977, State Realty Company owned the site. State Realty Company later co-owned Wilco Finishing Corp.(EDR 2010).

Lafayette Display Fixtures, Inc., also known as Lafayette Polishing and Plating, was incorporated on January 4, 1971 (NYSDOS 2011). Available documents indicate Lafayette Display Fixtures, Inc., conducted metal finishing operations at 375 Suydam Street as early as 1985 (NYCDEP 1985). Lafayette Display Fixtures, Inc., dissolved operations on December 23, 1992 (NYSDOS 2011).

7 CURRENT AND HISTORICAL AREAS OF CONCERN AND COPCs

The current understanding of the historical and current potential upland areas of concern at the site is summarized in Table 1. The following sections provide brief discussion of the potential sources and COPCs at the site requiring additional discussion.

Potential areas of concern at the site include areas in which electroplating and metal finishing practices and operations (including nickel, chromium and copper plating, nickel and chromium stripping, acid and alkaline cleaning, acid pickling, electro cleaning, polishing, and site discharges) occurred and an underground storage tank (UST). The COPCs associated with these areas of concern include volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals (primarily nickel, chromium, and copper), and petroleum hydrocarbons (including No. 2 fuel oil).

7.1 Uplands

The site operations included nickel, chromium and copper plating, nickel and chromium stripping, acid and alkaline cleaning, acid pickling, electro cleaning, and polishing. Wastewater from the nickel and chromium plating rinses was evaporated, and the remaining solution was used to replenish the plating bath. Wastewater from the nickel and chromium stripping and copper plating was evaporated, and the sludge was manifested and shipped off site. Other wastewater entered a pit and was pH-adjusted before being discharged to the sewer (NYCDEP 2004c, 2004i). The pretreatment system involved an automatic pH monitoring system that maintained the pH of wastewater at the end of process (EOP; permitted discharge point E1) between 8 and 9 by neutralizing the wastewater with sulfuric acid and/or sodium hydroxide. Dead rinses and evaporators were utilized in the nickel and chromium lines, creating a closed loop system (NYCDEP 2004g, 2004i). In 2005, the company discontinued the nickel activator, alkaline copper and cleaner operations, and removed related tanks (NYCDEP 2005a).

Between 1985 and 2005, the site received several NYCDEP Bureau of Wastewater Treatment notices of violations (NOVs) and Commissioner's Orders for wastewater discharge exceedences and non-compliance, as discussed in Section 9.3 of this site summary.

Between 1993 and 2008 the site was intermittently classified as a Resource Conservation and Recovery Act (RCRA) hazardous waste small quantity generator (SQG), conditionally exempt SQG, and large quantity generator (LQG; EDR 2010). Waste manifests indicate that the site shipped non-listed corrosive wastes (D002) between 1994 and 2006 and additional unspecified wastes in 2008 and 2009. A 2008 hazardous waste summary also indicates that the site generated non-listed corrosive (D002) and chromium-containing (D007) wastes in 2008 (EDR 2010). In 2011, the site was classified as an active LQG (USEPA 2011). Between 1996 and 2007 the site received 21 NOVs, some of which were hazardous waste-related (EDR 2010).

The site is a registered petroleum bulk storage (PBS) facility (PBS No. 2-090581; NYSDEC 2012). A 4,000-gallon steel/carbon steel UST was installed at the site in December 1955 (EDR 2010). The UST was used to store No. 2 fuel oil and was equipped with an overfill product level gauge; however, it was lacking secondary containment, tank leak detection, internal and external tank protection, and external pipe protection (NYSDEC 2012; EDR 2010). The tank was closed in place in November 1998 (NYSDEC 2012).

7.2 Overwater Activities

This site is not adjacent to Newtown Creek or associated waterways. Information regarding overwater activities was not identified in documents available for review.

7.3 Spills

Information regarding on-site spills was not identified in documents available for review.

8 PHYSICAL SITE SETTING

Site-specific hydrogeologic information was not identified in documents available for review. The geologic setting for Newtown Creek consists of impermeable Precambrian and Paleozoic crystalline bedrock, overlain by the Upper Cretaceous Raritan formation, Magothy formation and Matawan Group (undifferentiated), unconsolidated Pleistocene deposits and upper Pleistocene glacial deposits and Holocene shore, beach salt-marsh deposits, and alluvium, along with local occurrences of artificial fill (Buxton et al. 1981; Soren and

Simmons 1987). The primary areas of groundwater discharge are Newtown Creek and its tributaries and the East River (Misut and Monti 1999). In the vicinity of Newtown Creek, groundwater flow in the Upper Glacial aquifer is generally north and south towards the creek. With increased distance from the creek, groundwater will flow towards the nearest surface water body to discharge (Misut and Monti 1999). Incidences of perched groundwater may occur above the Upper Glacial Aquifer in some areas, particularly in formerly low-lying areas that have been filled. Groundwater flow at a specific property may differ from the regional pattern due to pumping for groundwater treatment or dewatering activities (Misut and Monti 1999), the presence of buried utilities, or other preferential pathways.

9 NATURE AND EXTENT (CURRENT UNDERSTANDING OF ENVIRONMENTAL CONDITIONS)

9.1 Soil

Soil Investigations	☐	Yes	☒	No		
Bank Samples	☐	Yes	☐	No	☒	Not Applicable
Soil-Vapor Investigations	☐	Yes	☒	No		

Information regarding on-site soil investigations was not identified in documents available for review.

9.2 Groundwater

Groundwater Investigations	☐	Yes	☒	No		
NAPL Presence (Historical and Current)	☐	Yes	☒	No		
Dissolved COPC Plumes	☐	Yes	☒	No		
Visual Seep Sample Data	☐	Yes	☐	No	☒	Not Applicable

Information regarding on-site groundwater investigations was not identified in documents available for review.

9.3 Surface Water

Surface Water Investigation	☐ Yes	☒ No
SPDES Permit (Current or Past)	☐ Yes	☒ No
IDW Permit (Current or Past)	☒ Yes	☐ No
Stormwater Data	☐ Yes	☒ No
Catch Basin Solids Data	☐ Yes	☒ No
Wastewater Data	☒ Yes	☐ No

9.3.1 Stormwater and Wastewater Systems

Information about on-site stormwater management and infrastructure was not identified in documents available for review. The site is within the Newtown Creek WPCP sewershed. Wastewater at the site is treated (as described in Section 7.1) prior to discharge from the site into a combined municipal sewer system. When the combined flows exceed the system's capacity, untreated CSOs are discharged through Outfall NC-015 to English Kills, a tributary to Newtown Creek (NYCDEP 2007).

9.3.2 Industrial Wastewater Discharge Permits

Five IWD permits have been issued to the site by NYCDEP, as shown in the following table:

Permit Number	Start Date	Expiration Date
92-P 48-1 (NYCDEP 1992b)	10/1/92	9/30/97
93-P48-1A1 (NYCDEP 1993)	8/15/93	8/14/98
98-P48-1 (NYCDEP 1998)	8/15/98	8/14/03
02-P48-2 (NYCDEP 2002b)	4/4/02	8/11/03
03-P48-1 (NYCDEP 2003a)	8/8/03	8/7/08

Note:
NYCDEP – New York City Department of Environmental Protection

IWD permits authorize discharge of industrial wastewater to the New York City sewerage system. IWD permits for the site have historically authorized discharge from two discharge points at the site. These permitted discharge points changed from 1993 to 1998 (NYCDEP 1993, 1998). Discharge limitations, monitoring requirements, and other conditions for each discharge point are outlined in each permit.

IWD permits for the site have expired, and no current IWD permits were located in files available for review. The most recent IWD permit is summarized in the following table:

<table>
<tr><th>Permit Type</th><th>Permit Number</th><th>Effective Date</th><th>Outfalls[1]</th><th>Volume</th><th>Frequency-Parameters</th></tr>
<tr><td>Industrial Wastewater Discharge Permit</td><td>03-P48-1</td><td>8/8/03</td><td>Discharge Point E1: A 4-inch-diameter effluent pipe, located in a 14-inch by 13-inch pit, 26 inches above pit floor level (Tool Room), situated 53 inches from the interior wall facing Willoughby Avenue, and 44 inches from the interior wall facing Wyckoff Avenue</td><td>Unknown</td><td>Based on a facility's electroplating process wastewater flow of fewer than 10,000 gallons per calendar day, the process wastewater discharge from point E1 is covered by the Federal Electroplating Point Source Category, 40 CFR part 413, and shall not exceed the following standards:
<table>
<tr><th colspan="3">Federal Categorical Standards (40 CFR § 413.14 (b) & (f))</th></tr>
<tr><th>Pollutant</th><th>Daily Maximum (mg/L)</th><th>Average of Daily Values for Four Consecutive Monitoring Days (mg/L)</th></tr>
<tr><td>Cadmium</td><td>1.2</td><td>0.7</td></tr>
<tr><td>Lead</td><td>0.6</td><td>0.4</td></tr>
<tr><td>Cyanide (Amenable)</td><td>5.0</td><td>2.7</td></tr>
<tr><td>Total Toxic Organics (TTO)[2]</td><td>4.57</td><td>--</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>Permit Type</th><th>Permit Number</th><th>Effective Date</th><th>Outfalls[1]</th><th>Volume</th><th>Frequency-Parameters</th></tr>
<tr><td></td><td></td><td></td><td>Discharge Point M1: A 6-inch-diameter housetrap, located in a 30-inch by 47-inch by 64-inch pit, 64 inches above pit floor level, situated 18 inches from the interior wall facing Irving Avenue, and 18 inches from the exterior wall facing Suydam Street.</td><td>Unknown</td><td>The discharges from points E1 and M1 shall not exceed the following New York City Sewer Use Limits:
<table>
<tr><td colspan="3">Sewer Use Limits
(15 RCNY chapter 19)</td></tr>
<tr><td>Pollutant</td><td>Permissible Maximum Concentration For Any Given Time (mg/L)</td><td>Daily Average Maximum Concentration (mg/L)</td></tr>
<tr><td>pH</td><td>5.0-11.0 Standard Units</td><td>--</td></tr>
<tr><td>Cadmium</td><td>2.0</td><td>0.69</td></tr>
<tr><td>Chromium (Hexavalent)</td><td>5.0</td><td>--</td></tr>
<tr><td>Copper</td><td>5.0</td><td>--</td></tr>
<tr><td>Lead</td><td>2.0</td><td>--</td></tr>
<tr><td>Mercury</td><td>0.05</td><td>--</td></tr>
<tr><td>Nickel</td><td>3.0</td><td>--</td></tr>
<tr><td>Zinc</td><td>5.0</td><td>--</td></tr>
<tr><td>Cyanide (Amenable to Chlorination)</td><td>0.2</td><td>--</td></tr>
<tr><td>Non-Polar Material</td><td>50.0</td><td>--</td></tr>
</table></td></tr>
</table>

Notes:
1 – This site is within the sewershed of CSO Outfall NC-015, which is located at the southeast end of English Kills.
2 – Defined in 40 CFR § 413.02(i) as the sum of all quantifiable values greater than 0.01 milligrams per liter of the 111 toxic organic compounds listed in the IWD permit. Toxic organic compounds are comprised of two subcategories: volatile organic compounds and semi-volatile organic compounds. There are different sampling methods for each subcategory (see Part I, Sect. B. Monitoring Requirements).
CFR – Code of Federal Regulations
CSO – combined sewer overflow
mg/L – milligram per liter
RCNY – Rules of the City of New York
TTO – total toxic organic

Between 1985 and 1990 NYCDEP Bureau of Wastewater Treatment issued seven NOVs and non-compliance to Lafayette Display Fixtures, Inc. (NYCDEP 1985, 1988a, 1988b, 1989a, 1989b, 1989d, 1990). The site was included on New York City's Significant Noncompliance List[2] between July 1, 1987, to June 30, 1988 (NYCDEP 1988b).

Fifteen Commissioner's Orders were issued to Wilco Finishing Corp. between 1992 and 2005 (NYCDEP 1992a, 1996b, 1996c, 2002a, 2002d, 2002e, 2003d, 2004d, 2004e, 2004f, 2004j, 2004k, 2004m, 2005b, 2005c). Several orders were issued in response to pH and nickel exceedances and required corrective actions by the site. Exceedances are described in the following table:

Date	Order No.	Details
06/08/92	4276 (NYCDEP 1992a)	Order issued due to failure to take accidental spill precautions; spill prevention equipment must be installed.
05/01/96	9035 (NYCDEP 1996b)	Establishment must submit sampling results of the wastewater discharged into the public sewer pursuant to the notification of non-compliance for nickel exceedances.
06/17/96	9345 (NYCDEP 1996c)	Establishment must submit sampling results of the wastewater discharged into the public sewer pursuant to the notification of non-compliance for nickel exceedances.
01/22/02	18322 (NYCDEP 2002a)	Must submit engineering plans (by licensed NYSPE or RA); current diagram incorrect (tanks missing).
05/23/02	19437 (NYCDEP 2002d)	Establishment must submit sampling results of the wastewater discharged into the public sewer pursuant to the notification of non-compliance for pH exceedances.
05/23/02	19438 (NYCDEP 2002e)	Establishment must submit pH strip charts for the past 3 months from the EOP due to non-compliance for pH exceedances.
10/27/03	23004 (NYCDEP 2003d)	Order issued due to nickel exceedances in wastewater discharged (NYCDEP 2003c).
02/24/04	23968 (NYCDEP 2004d)	Establishment must submit sampling results of the wastewater discharged into the public sewer pursuant to the notification of non-compliance for pH exceedances.
04/01/04	23976 (NYCDEP 2004e)	Order issued due to nickel and pH exceedances at discharge point MHT.
04/01/04	23977 (NYCDEP 2004f)	Must maintain a pH calibration log book.

[2] Significant noncompliance is defined in 40 CFR 403.8(f)(2)(vii) of the Code of Federal Regulations and Title 15, Section 19-10 (g) of the Rules of the City of New York (NYCDEP 1988b).

Date	Order No.	Details
08/02/04	24582 (NYCDEP 2004j)	Order to evaluate pretreatment system and submit report.
08/02/04	24597 (NYCDEP 2004k)	Establishment is prohibited from running rinse water when metal finishing operations are in progress.
11/15/04	26426 (NYCDEP 2004m)	Order issued due to nickel and pH exceedances at discharge point MHT (NYCDEP 2004l). Order also included request to explain how trace element enters the acid and alkaline cleaning rinses, as indicated in a pretreatment evaluation report dated August 9, 2004.
03/08/05	27741 (NYCDEP 2005b)	Must submit explanation for cause of higher metal concentrations in MHT than EOP.
07/11/05	28783 (NYCDEP 2005c)	Establishment must submit a process layout diagram, including equipment layout, tank capacities and contents, pretreatment units, location of drains, and flow diagram for such drains.

Notes:
EOP – end of process
MHT – main housetrap
NYCDEP – New York City Department of Environmental Protection
NYSPE – New York State Professional Engineer
RA – registered architect

Other violations on file issued to Wilco Finishing Corp. include the following:

- A Dilution Notice (NYCDEP date unknown[a]) for attempted illegal diluting of a discharge and a Pretreatment Standards for Existing Sources document (NYCDEP date unknown[b]).
- An Explanation for Issuance (NYCDEP 1997) describing Commissioner's Order No. 93115 issued for nickel exceedences. Commissioner's Order No. 93115 was not found in available documents.
- A 2003 decision and order for an unknown violation (illegible due to poor copy quality; NYCDEP 2004h)
- A 2004 citation for pH exceedences of fewer than 5 (limit: 5 < pH < 11; NYCDEP 2004a)

9.3.3 NPDES/SPDES Permit

The U.S. Environmental Protection Agency (USEPA) Enforcement and Compliance History Online (ECHO) database search indicates the site has been assigned a National Pollutant Discharge Elimination System (NPDES) identification number (ID; NPDES ID No.

NYP081080; USEPA 2011). However, no historical or current NPDES permit or State Pollutant Discharge Elimination System (SPDES) permit has been located in available documents.

9.3.4 Wastewater Data

Wastewater data identified in files available for review is summarized as follows:

Report Date	Constituent	Result	Unit	Limit	Notes
11/27/89 (NYCDEP 1989c)	Chromium (Cr)	3.6	mg/L	Not specified	Report largely illegible due to poor copy quality.
	Cadmium (Cd)	x	mg/L	Not specified	
	Copper (Cu)	x	mg/L	Not specified	
	Nickel (Ni)	x	mg/L	Not specified	
	Lead (Pb)	x	mg/L	Not specified	
	Zinc (Zn)	0.082	mg/L	Not specified	
04/27/95 (NYCDEP 1995)	Lead (Pb)	Exceedance	mg/L	Not specified	General remarks indicate exceedances; however, the raw data is illegible due to poor copy quality.
	Nickel (Ni)	Exceedance	mg/L	Not specified	
04/29/96 (NYCDEP 1996a)	Nickel (Ni)	5.2	mg/L	3.0	---
05/06/02 (NYCDEP 2002c)	pH	<4	SU	5 < pH < 11	---
10/24/03 (NYCDEP 2003b)	Nickel (Ni)	3.17	mg/L	3.0	---
02/17/04 (NYCDEP 2004b)	pH	<4	SU	5 < pH < 11	---
03/30/04 (NYCDEP 2004b)	Nickel (Ni)	3.6	mg/L	3.0	---
	pH	<5	SU	5 < pH < 11	---

Notes:
--- – no notes reported
mg/L – milligram per liter
NYCDEP – New York City Department of Environmental Protection
SU – standard unit
x – constituent analyzed for; however, results illegible due to poor copy quality

9.3.5 Surface Water Summary

Information about on-site stormwater management and infrastructure was not identified in documents available for review. Wastewater at the site is treated (as described in Section 7.1) prior to discharge from the site into a combined municipal sewer system. When the combined flows exceed the system's capacity, untreated CSOs are discharged through Outfall NC-015 to English Kills, a tributary to Newtown Creek (NYCDEP 2007). NYCDEP issued an IWD permit to the site in 1992. The permit was renewed in 1993, 1998, 2002, and 2003 (NYCDEP 1992b, 1993, 1998, 2002b, 2003a). Additional permits were not identified in documents available for review. Metal concentrations and pH exceeded permitted discharge limits several times between 1995 and 2004 (NYCDEP 1995, 1996a, 2002a, 2003b, 2004b).

9.4 Sediment

Creek Sediment Data ☐ Yes ☐ No ☒ Not Applicable

Information regarding sediment investigations was not identified in documents available for review.

9.5 Air

Air Permit ☐ Yes ☒ No

Air Data ☐ Yes ☒ No

9.5.1 Air Permit

The AFS database indicates that an air discharge permit (AFS No. 3604703030) has been issued to the site; however, copies of the permit were not located in documents available for review (USEPA 2011).

10 REMEDIATION HISTORY (INTERIM REMEDIAL MEASURES AND OTHER CLEANUPS)

Information regarding on-site remedial activities was not identified in documents available for review.

11 BIBLIOGRAPHY/INFORMATION SOURCES

Buxton et al. (Buxton, H.T., Soren, J., Posner, A., and Shernoff, P.K.), 1981. *Reconnaissance of the Groundwater Resources of Kings and Queens Counties, New York.* U.S. Department of the Interior, U.S. Geological Survey. Open-File Report 81-1186. 1981.

EDR (Environmental Data Resources, Inc.), 2010. EDR DataMap™ Environmental Atlas™ for "Newton Creek Queens, New York." November 4, 2010.

Misut and Monti (Misut, P.E., and Monti, J. Jr.), 1999. *Simulation of Ground-Water Flow and Pumpage in Kings and Queens Counties, Long Island, New York*. U.S. Geological Survey. Water-Resources Investigations Report 98-4071.

NYCDCP (New York City Department of City Planning), 2011. MapPLUTO™ Ed.11V2 Vector Digital Data. December 2011.

NYCDEP (New York City Department of Environmental Protection), 1985. Notice of Violation and Hearing. Issued to Lafayette Polishing and Plating, Inc. March 25, 1985.

NYCDEP, 1988a. *Fourth Progress Report, July 1, 1987 to March 31, 1988*. New York City Department of Environmental Protection, Industrial Pretreatment Program. April 21, 1988.

NYCDEP, 1988b. *Fifth Progress Report, April 1 to September 30, 1988*. New York City Department of Environmental Protection, Industrial Pretreatment Program. October 19, 1988.

NYCDEP, 1989a. *Sixth Progress Report, October 1, 1988 to March 31, 1989*. New York City Department of Environmental Protection, Industrial Pretreatment Program. April 7, 1989.

NYCDEP, 1989b. Notification of Non-Compliance. Issued to Lafayette Display Fixtures, Inc. March 1, 1989.

NYCDEP, 1989c. *Industrial Wastes Control Section Laboratory Report*. November 27, 1989.

NYCDEP, 1989d. Notice of Violation and Hearing. Issued to Lafayette Display Fixtures, Inc. December 6, 1989.

NYCDEP, 1990. Notification of Non-Compliance. Issued to Lafayette Display Fixtures, Inc. June 14, 1990.

NYCDEP, 1992a. Commissioner's Order No. 4276. Issued to Wilco Finishing Corp. June 8, 1992.

NYCDEP, 1992b. Industrial Wastewater Discharge Permit. Wilco Finishing Corp. Permit No. 92-P 48-1. October 1, 1992.

NYCDEP, 1993. Industrial Wastewater Discharge Permit. Wilco Finishing Corp. Permit No. 93-P48-1A1. August 15, 1993.

NYCDEP, 1995. *Industrial Wastes Control Section Laboratory Report*. Sample No. 95P629. February 3, 1995.

NYCDEP, 1996a. *Industrial Wastes Control Section Laboratory Report*. Sample No. 96P276. February 20, 1996.

NYCDEP, 1996b. Commissioner's Order No. 9035. Issued to Wilco Finishing Corp. May 1, 1996.

NYCDEP, 1996c. Commissioner's Order No. 9345. Issued to Wilco Finishing Corp. June 17, 1996.

NYCDEP, 1997. Explanation for Issuance. Wilco Finishing Corp. New York City Department of Environmental Protection, Enforcement and Compliance Section. June 17, 1997.

NYCDEP, 1998. Industrial Wastewater Discharge Permit. Issued to Wilco Finishing Corp. Permit No. 98-P48-1. August 15, 1998.

NYCDEP, 2002a. Commissioner's Order No. 18322. Issued to Wilco Finishing Corp. January 22, 2002.

NYCDEP, 2002b. Industrial Wastewater Discharge Permit. Issued to Wilco Finishing Corp. Permit No. 02-P48-2. April 4, 2002.

NYCDEP, 2002c. Lab Report General Remarks. May 6, 2002.

NYCDEP, 2002d. Commissioner's Order No. 19437. Issued to Wilco Finishing Corp. May 23, 2002.

NYCDEP, 2002e. Commissioner's Order No. 19438. Issued to Wilco Finishing Corp. May 23, 2002.

NYCDEP, 2003a. Industrial Wastewater Discharge Permit. Issued to Wilco Finishing Corp. Permit No. 03-P48-1. August 8, 2003.

NYCDEP, 2003b. Lab Report General Remarks. October 24, 2003.

NYCDEP, 2003c. Explanation for Issuance of NON, NOV, and Commissioner's Order. Wilco Finishing Corp. Compliance Engineering Section. October 27, 2003.

NYCDEP, 2003d. Commissioner's Order No. 23004. Issued to Wilco Finishing Corp. October 27, 2003.

NYCDEP, 2004a. Notice of Violation and Hearing. February 2, 2004.

NYCDEP, 2004b. Lab Report General Remarks. February 17, 2004.

NYCDEP, 2004c. Establishment Inspection Report Form. New York City Department of Environmental Protection, IPP Inspection and Permit Section. February 24, 2004.

NYCDEP, 2004d. Commissioner's Order No. 23968. Issued to Wilco Finishing Corp. February 24, 2004.

NYCDEP, 2004e. Commissioner's Order No. 23976. Issued to Wilco Finishing Corp. April 1, 2004.

NYCDEP, 2004f. Commissioner's Order No. 23977. Issued to Wilco Finishing Corp. April 1, 2004.

NYCDEP, 2004g. Establishment Inspection Report Form. New York City Department of Environmental Protection, IPP Inspection and Permit Section. April 1, 2004.

NYCDEP, 2004h. Decision and Order. May 20, 2004.

NYCDEP, 2004i. Establishment Inspection Report Form. New York City Department of Environmental Protection, IPP Inspection and Permit Section. August 2, 2004.

NYCDEP, 2004j. Commissioner's Order No. 24582. Issued to Wilco Finishing Corp. August 2, 2004.

NYCDEP, 2004k. Commissioner's Order No. 24597. Issued to Wilco Finishing Corp. August 2, 2004.

NYCDEP, 2004l. Explanation for Issuance. Wilco Finishing Corp. November 15, 2004.

NYCDEP, 2004m. Commissioner's Order No. 26426. Issued to Wilco Finishing Corp. November 15, 2004.

NYCDEP, 2005a. Establishment Inspection Report Form. New York City Department of Environmental Protection, IPP Inspection and Permit Section. March 8, 2005.

NYCDEP, 2005b. Commissioner's Order No. 27741. Issued to Wilco Finishing Corp. March 8, 2005.

NYCDEP, 2005c. Commissioner's Order No. 28783. Issued to Wilco Finishing Corp. July 11, 2005.

NYCDEP, 2007. *Landside Modeling Report, Sewershed Characteristics and Model Calibration*. City-Wide Long Term CSO Control Planning Project. Newtown Creek WPCP Service Area. Draft. New York City Department of Environmental Protection, Bureau of Engineering Design and Construction. July 2007.

NYCDEP, date unknown[a]. Dilution Notice.

NYCDEP, date unknown[b]. Pretreatment Standards for Existing Sources.

NYSDEC, 2012. Environmental Remediation Databases. Accessed March 27, 2012. Available from: http://www.dec.ny.gov/cfmx/extapps/derexternal/

NYSDOS (New York State Department of State), 2011. Online registry of corporations operating in the State of New York. New York State Department of State. 2011. Available from: http://www.dos.state.ny.us/corps/bus_entity_search.html

Sanborn (Sanborn Map Company), 1907. *Insurance Maps of the Borough of Brooklyn, City of New York.* Volume 9: Sheet 49. Original 1907.

Sanborn, 1933. *Insurance Maps of the Borough of Brooklyn, City of New York.* Volume 9: Sheet 49. Original 1933.

Soren and Simmons (Soren, J. and Simmons, D.L.), 1987. *Thickness and Hydrogeology of Aquifers and Confining Units Below the Upper Glacial Aquifer on Long Island, New York*. U.S. Geological Survey. Water-Resources Investigations Report 86-4175. Scale 1:125,000.

USEPA (U.S. Environmental Protection Agency), 2011. USEPA Envirofacts Database. Accessed November 30, 2011. Available from: http://www.epa.gov/enviro/index.html

12 ATTACHMENTS

Figures

Figure 1 Site Vicinity Map: Wilco Finishing Corp.

Tables

Table 1 Potential Areas of Concern and Transport Pathways Assessment

Table 1

Potential Areas of Concern and Transport Pathways Assessment – Wilco Finishing Corp.

Potential Areas of Concern	Media Impacted					COPCs														Potential Complete Pathway						
						TPH			VOCs																		
Description of Areas of Concern	Surface Soil	Subsurface Soil	Groundwater	Catch Basin Solids	Creek Sediment	Gasoline-Range	Diesel – Range	Heavier – Range	Petroleum Related (e.g., BTEX)	VOCs	Chlorinated VOCs	SVOCs	PAHs	Phthalates	Phenolics	Metals	PCBs	Herbicides and Pesticides	Dioxins/Furans	Overland Transport	Groundwater	Direct Discharge – Overwater	Direct Discharge – Storm/Wastewater	Discharge to Sewer/CSO	Bank Erosion	Air Releases
Equipment and products used and activities performed in former electroplating and metal finishing practices and operations (including nickel, chromium and copper plating, nickel and chromium stripping, acid and alkaline cleaning, acid pickling, electro cleaning, and polishing, and site discharges)	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	√	?	?	?	--	?	--	?	√	--	?
Equipment and products used and activities performed in current electroplating practices and operations	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	--	?	--	?	?	--	?
Former UST (closed in 1998)	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	--	?	--	?	?	--	?

Notes:
√ – COPCs are/were present in areas of concern having a current or historical pathway that is determined to be complete or potentially complete.
? – There is not enough information to determine if COPC is/was present in area of concern or if pathway is complete.
-- – Current or historical pathway has been investigated and shown to be not present or incomplete.

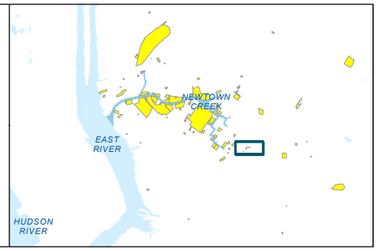
BTEX – benzene, toluene, ethylbenzene, and xylene
COPC – constituent of potential concern
CSO – combined sewer overflow
PAH – polycyclic aromatic hydrocarbon
PCB – polychlorinated biphenyl
SVOC – semi-volatile organic compound
TPH – total petroleum hydrocarbon
UST – underground storage tank
VOC – volatile organic compound

USEPA Sample Locations (Surface and Subsurface)
Shoreline (NYC Dept. of Information Technology, 2006)
USGS Nat'l Elev. Dataset 5-foot Contours
Selected Site Property Boundary
Neighboring Site Property Boundary

Outfall Class
- Direct Discharge
- General
- Highway Drain
- Major Stormwater Outfall
- SPDES
- Storm Drain

NOTES:
1. Outfall Labeling: BB: Bowery Bay; NC(B/Q): Newtown Creek, Brooklyn/Queens; ST: Stormwater.
2. Outfall locations are preliminary, compiled, estimated data based on New York City Department of Environmental Protection (NYCDEP) maps and tabulated data and other resources. Many outfall locations were taken from the New York City Shoreline Survey Program: Newtown Creek Water Pollution Control Plant Drainage Area, NYCDEP, March 31, 2003. Other locations were taken from an excerpt from a similar report from 2008 (the complete report was not included in files available for review). Finally, some outfall locations were inherited from previous Anchor QEA and Newtown Creek Project work. Latitudinal and longitudinal data provided in the 2003 and 2008 NYCDEP reports were rounded to the nearest second. This resulted in potential outfall location discrepancies of up to approximately 200 feet. All outfall locations are currently under field verification.
3. Aerial Photos: New York State Division of Homeland Security and Emergency Services, 2010.
4. Site Boundaries are based on New York City parcels data.
5. Coarse topographic contours are derived from U.S. Geological Survey 10-meter data.

Feet
0 100 200 300 400



ANCHOR QEA

DRAFT

Figure 1
Site Vicinity Map
Draft Upland Site Summary: Wilco Finishing Corp.
Newtown Creek RI/FS